

### REMARKS

Reconsideration of the Final Office Action mailed March 14, 2003, (hereinafter "instant Office Action"), entry of the foregoing amendments and withdrawal of the rejection of claims 18-21 and 23-45, are respectfully requested.

In the instant Office Action, claims 18-21 and 23-45 are listed as pending, and claims 18-21 and 23-45 are listed as rejected. Claim 1-17 and 22 were previously withdrawn by the Examiner.

The Examiner has rejected claim 18 under 35 U.S.C. §102(b), for allegedly being anticipated by Hiremath et al. The Examiner alleges that claim 18 reads on compounds 8a-f and 13a-d on page 761 of Hiremath et al. Compounds 8a-f and 13a-d of Hiremath et al. have been provisoed out of Claim 18.

Based upon the foregoing, the rejection of claim 18 under 35 U.S.C. §102(b) over Hiremath et al. is obviated and should be withdrawn.

The Examiner has rejected claim 18 under 35 U.S.C. §102(b), for allegedly being anticipated by Mitra et al. The Examiner alleges that Mitra et al. teaches the compound with RN 6871-49-9 which corresponds to the compound of the instant claim when in the instant case R<sup>1</sup> is methyl and R is phenyl. Applicants have amended claim 18 to proviso the compound of Formula (II) of Mitra, where R<sub>1</sub> is phenyl and R<sub>b</sub> is H.

Based upon the foregoing, the rejection of claim 18 under 35 U.S.C. §102(b) over Mitra et al. is obviated and should be withdrawn.

The Examiner has rejected claim 18 under 35 U.S.C. §103(a) as allegedly being unpatentable over Blum et al. (US 6,074,878). The Examiner alleges that the reference teaches the compound of example 10 and that the claim differs by having a hydrogen over the prior art methyl on the ring nitrogen of the pyrazolinone. Applicants respectfully traverse this rejection.

### BASIC REQUIREMENTS OF A *PRIMA FACIE* CASE OF OBVIOUSNESS

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all claim limitations.

MPEP §2143

The Examiner has not established a *prima facie* case of obviousness. The reference does not provide any suggestion or motivation to modify Blum et al. to arrive at Applicants' genus. Second, there must be a reasonable expectation of success. Blum et al is directed to use of compounds as dyes, whereas the instant application is directed to compounds and their use as inhibitors of protein kinase activity, an entirely different and unrelated use. One of ordinary skill in the art of medicinal chemistry would not expect a dye to be an effective inhibitor of protein kinase activity. Applicants respectfully direct the Examiner's attention to In re Oetiker, 24 USPQ2d 1443 (1992), wherein the Court of Appeals for the Federal Circuit stated that:

In order to rely on a reference as a basis for rejection of the applicant's invention, the reference must either be in the field of the applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.

In re Oetiker, 24 USPQ2d at 1445.

Applicants' compounds have a completely different use than the compounds in Blum et al., i.e. kinase inhibitors as opposed to dyes. Therefore, one of ordinary skill in the art would not be motivated to look to Blum for a suggestion of Applicants' Claim 18, since the two subject matters are in such divergent fields.

The Court of Appeals for the Federal Circuit has stated the following on the issue of obviousness:

Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F. 2d 1044, 1051-52, 5 USPQ 1434, 1438 (Fed. Cir. 1988), cert. denied, 109 S. Ct. 75 (1988), on remand, 13 USPQ2d 1192 (D. Conn. 1989) "Something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination."; In re Stencel, 828 F. 2d 751,755, 4 USPQ2d 1071, 1073 (Fed. Cir. 1987) obviousness cannot be established "by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion that the combination be made." Alco Standard Corp. v. Tennessee Valley Authority, 808 F. 2d 1490, 1498, 1 USPQ2d 1337, 1343 (Fed. Cir. 1986), cert. dismissed, 108 S. Ct. 26 (1987) "the question is not simply whether the prior art 'teaches' the particular element of the invention, but whether it would 'suggest the desirability, and thus the obviousness, of making the combination.'"; Carella v. Starlight Archery, 804 F. 2d 135,231 USPQ 644 (Fed. Cir. 1986); ACS Hospital Sys., Inc. v. Montefiore Hospital, 732 F. 2d 1572, 221 USPQ 929 (Fed. Cir. 1984) "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so."

Donald S. Chisum, Patents, A Treatise on the Law of Patentability, Validity and Infringement, Vol. 2, 5-218, 1992.

Blum et al. does not teach or suggest all of the limitations of Applicants' claims. The Examiner alleges that with respect to example 10 of Blum, Applicants' compound differs by having a hydrogen over the prior art methyl on the ring nitrogen of the pyraolinone. With respect to motivation or suggestion within the reference itself to modify the reference so that it would encompass Applicants' invention, the Examiner cites Ex Parte Weston and Hamlin 121 USPQ 428, Ex parte Bluestone and In re Doebel stating that these cases "affirm that NCH<sub>3</sub> is obvious over N-H." The Examiner also cites In re Hoeksema, 154 USPQ 169 "...a chemist looking at the formula for another compound which differs so slightly that it is called a homolog generally expects the second compound to have properties similar to the first one." Applicants respectfully point out that Blum is directed to dyes, whereas the instant application is directed to therapeutic agents. Blum is nonanalogous art. One skilled in the art of medicinal chemistry would not look to the field of dyes for therapeutics. Blum does not suggest or teach the genus in Applicants' Claim 18.

To establish a *prima facie* case of obviousness, the invention must be considered as a whole, there must be some suggestion or motivation to modify the reference, the reference must teach or suggest all of the claim limitations and there must be a reasonable chance of success.

The Examiner alleges that "The reference teaches the compound of example 10 (see cols 13-14). The claim differs by having a hydrogen over the prior art methyl on the ring nitrogen of the pyrazolinone." However, an invention is to be considered as a whole. That is, in this case, does Blum et al. make obvious the entire genus of any of Applicants' claims? The claimed invention may not be dissected into discrete elements to be analyzed in isolation, but must be considered as a whole. See, e.g. W.L. Gore & Assoc. Inc. v. Garlock, Inc. 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983)); Jones v. Hardy, 727 f.2d 1524, 1530, 220 USPQ 1021, 1026 (Fed. Cir. 1983).

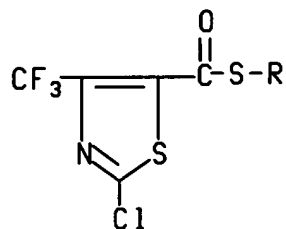
In determining the differences between the prior art and the claims, the question under 35 U.S.C. §103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); Schenck v. Nortron Corp., 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). The Examiner has not shown how Blum et al. renders obvious the entire genus of Applicants' claim. Further, Blum et al. does not teach or suggest all of the

limitations of Applicants' claim. As stated in M.P.E.P. 2143.03, "To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art." In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Applicants maintain that Blum et al. does not render claim 18 obvious.

Even in a case where the structural similarity was close, the CAFC has stated that a definite suggestion is needed in order to make the modification to establish a *prima facie* case of obviousness. In In re Grabiak the CAFC stated that "there must be adequate support in the prior art for the ester/thioester change in structure, in order to complete the PTO's *prima facie* case and shift the burden of going forward to the applicant." In re Grabiak, 226 USPQ 870, 872, 1985.

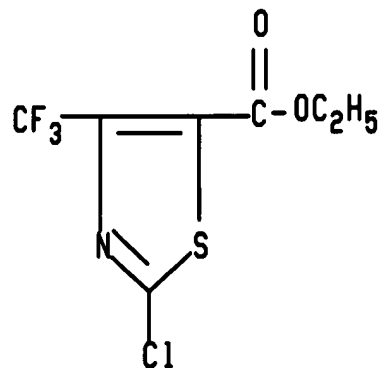
The Grabiak court made the above statement in light of the fact that both appellant's compounds and the prior art compounds were very similar in structure (see below) and had the same utility, namely, as herbicidal safeners.

Grabiak's Compound:



wherein R is  $\text{C}_{1-5}$  alkyl, phenyl or benzyl

Howe's (prior art) Compound:



Note that when the R substituent is ethyl in the Grabiak compound, that the only difference in structure between Grabiak and Howe is a single atom, namely, an oxygen atom versus a sulfur

atom. Hence, structural similarity and identical utility on its own cannot be the sole basis for a rejection under 35 U.S.C. § 103. Yet, the Examiner's rejection in the instant application under 35 U.S.C. § 103 does just that, except that in the instant case, the Blum et al. reference is one step further moved than in the Grabiak case since there is only structural similarity.

Based upon the foregoing, the rejection of claim 18 under 35 U.S.C. §103(a) over Blum et al. is obviated and should be withdrawn.

The Examiner has rejected claim 18 under 35 U.S.C. §103(a) as allegedly being unpatentable over Mitra et al. The Examiner alleges that compounds that are analogues, homologues or ring position isomers of the prior art compounds which Applicants have excluded by proviso are embraced by Applicants' claim 18 and render claim 18 obvious. Applicants respectfully traverse this rejection.

The Examiner has not established a *prima facie* case of obviousness. As discussed above in the traversal of the rejection of Claim 18 under 35 U.S.C. §103(a) over Blum et al., in order to establish a *prima facie* case of obviousness, first there must be some suggestion or motivation to modify the reference. The reference does not provide any suggestion or motivation to modify Mitra et al. to arrive at Applicants' genus. Second, there must be a reasonable expectation of success. Mitra et al. is directed to use of compounds as fungicides, whereas the instant application is directed to compounds and their use as inhibitors of protein kinase activity, an entirely different and unrelated use. One of ordinary skill in the art of medicinal chemistry would not expect a fungicide to be an effective inhibitor of protein kinase activity.

An invention is to be considered as a whole. That is, in this case, does Mitra et al. make obvious the entire genus of any of Applicants' claims? As discussed above in the traversal of the rejection of claim 18 under 35 U.S.C. §103(a) over Blum et al., numerous cases support that all of the claim limitations must be taught or suggested by the prior art, and that there must be adequate support in the prior art for any change in structure over the prior art. Further, the invention is to be considered as a whole, not parsed out into its individual components.

The Examiner cites as examples "A compound wherein R<sup>1</sup> is methyl and R is 2-hydroxy-3-chlorophenyl embraced by the claim is rendered obvious by the prior art compound wherein R<sup>1</sup> is methyl and R is 2-hydroxy-3-bromophenyl (one halogen renders the other obvious)", "A compound wherein R<sup>1</sup> is methyl and R is 4-hydroxy-3-bromophenyl embraced by the claim is rendered obvious by the prior art compound wherein R<sup>1</sup> is methyl and R is 2-hydroxy-3-

bromophenyl (ring position isomer)” and “A compound wherein R<sup>1</sup> is ethyl and R is 2-hydroxy-3-bromophenyl embraced by the claim is rendered obvious by the prior art compound wherein R<sup>1</sup> is methyl and R is 2-hydroxy-3-bromophenyl (methyl versus ethyl). Applicants do not have claims to the species suggested by the Examiner. Applicants’ claim 18 is a genus claim. Nonetheless, the question at issue is whether the invention as a whole would be obvious, not whether individual differences between the prior art and the claims would be obvious. The fact that a claimed species or subgenus is encompassed by a prior art genus is not sufficient by itself to establish a *prima facie* case of obviousness. In re Baird, 16 F.3d 380, 382, 29 USPQ2d 1550, 1552 (Fed. Cir. 1994). Thus, Mitra et al. does not establish a *prima facie* case of obviousness as to the entire genus of Claim 18.

Based upon the foregoing, the rejection of claim 18 under 35 U.S.C. §103(a) over Mitra et al. is obviated and should be withdrawn.

The Examiner rejected claims 18-21 and 23-45 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regards as the invention. Applicants respectfully traverse this rejection. Applicants’ response to the Examiner’s enumerated points are numbered accordingly to track the Examiner’s points.

iii) With respect to the term “substituted”, Applicants maintain the arguments presented in the two Replies filed August 26, 2002 and November 26, 2002. The Examiner asks how one can say for sure whether a given substituent is contemplated by Applicants or not. The test for definiteness under 35 U.S.C. §112, second paragraph, is whether “those skilled in the art would understand what is claimed when read in light of the specification”. Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). A clear example of the extent of reliance on the knowledge of those skilled in the art is give in Orthokinetics (supra):

It is undisputed that the claims require that one desiring to build and use a travel chair must measure the space between the selected automobile's doorframe and its seat and then dimension the front legs of the travel chair so they will fit in that particular space in that particular automobile. Orthokinetics’ witnesses, who were skilled in the art, testified that such a task is evident from the specification and that one of ordinary skill in the art would easily have been able to determine the appropriate dimensions.

The claims were intended to cover the use of the invention with various types of automobiles. That a particular chair on which the claims read may fit within some automobiles and not others is of no moment. The phrase "so dimensioned" is as accurate as the subject matter permits, automobiles being of various sizes. See Rosemount, Inc. v. Beckman Instruments, 727 F.2d 15400, 1547, 221 USPQ (BNA) 1, 7 (Fed. Cir. 1984). As long as those of ordinary skill in the art realized that the dimensions could be easily obtained, 35 U.S.C. § 112, second paragraph, requires nothing more. The patent law does not require that all possible lengths corresponding to the spaces in hundreds of different automobiles be listed in the patent, let alone that they be listed in the claims.

The question of the dimensions of the travel chair in Orthokinetics is analogous to the question of which substituents can be used in the instant application. That is, the foregoing case provides support to Applicants' position that the patent law does not require that all possible substituents be listed for a compound. One of ordinary skill in the art would realize that suitable substituents could be determined by referencing the examples provided and utilizing the assays contained in the instant specification to determine whether the substituted compound in question would fall within Applicants' claims.

Further, the term "substituted" is a well-known term which is understood by one of ordinary skill in the art. Furthermore, Applicants have provided the description for routine assays to determine the activity of a compound as well as listing preferred compounds and preferred examples. Thus, as long as a substitution as taught and enabled by the instant application in view of the art results in a compound that is chemically stable and shows the desired activity, such a compound would fall within Applicants' definition of "substituted". The 3rd Circuit Court has stated the following on the issue of knowledge of one skilled in the art and its relationship to the extent of disclosure required in a specification:

It is axiomatic that no description, however detailed, is 'complete' in a rigorous sense. Every description will rely to some extent on the reader's knowledge of the terms, concepts, and depictions it embodies. Thus, an understanding of any description will involve some measure of inference....[S]kill in the art can be relied upon to supplement that which is disclosed as well as to interpret what is written.

Rengo Co. Ltd. v. Molins Mach. Co., 657 F.2d 535, 211 USPQ 203 (3d Cir. 1980), *cert. denied*, 454 U.S. 1055.

Furthermore, Applicants list suitable substituents for R and R<sup>1</sup> on page 12, line 20 to line 25. In addition, Applicants provide assays for testing compounds to determine whether they

inhibit protein kinase activity and Applicants have provided 439 examples in the instant specification which illustrate numerous substituents, although Applicants have no duty to provide working examples.

One of ordinary skill in the art has been provided with sufficient enabling guidance as to which substituents would be suitable, as the nature and number of substituent(s) would be limited by the structure of the compound and the availability of binding sites. Applicant maintains that one skilled in the art is familiar with the above-noted terms and that the specification is fully enabling with respect to the terms objected to by the Examiner.

As stated in M.P.E.P. 2173.04, "Breadth of a claim is not to be equated with indefiniteness." In re Miller, 441 F.2d 689, 169, USPQ 597 (CCPA 1971). Furthermore, In re Borkowski, 57 CCPA 946; 422 F.2d 904; 1970 CCPA declares "If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph."

iv) Regarding claims 28-36, in Applicants' prior response to the Examiner's allegation that it was unclear what is intended to be accomplished in claims 28-36 in which Applicants pointed to the portion of the instant specification, i.e. page 91, lines 16-24, which defined what the compound of the invention do, which is inhibit protein kinases from serine/threonine and tyrosine kinases class. The Examiner now states that the claims need to be limited to these protein kinases because the claim as presented is broader than the broadest description in the specification. Applicants respectfully traverse this rejection.

M.P.E.P. §2173.02 states:

Definiteness of claim language must be analyzed, not in a vacuum, but in light of:

- (A) The content of the particular application disclosure;
- (B) The teachings of the prior art
- (C) The claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made.

With respect to the content of the application disclosure, as Applicants previously pointed out in the reply filed January 29, 2003, page 91, lines 16-24 of the instant application clearly define the activity of which protein kinases is inhibited. Further, as stated above with respect to the term "substituted", the test for definiteness under 35 U.S.C. §112, second paragraph, is whether "those skilled in the art would understand what is claimed when read in light of the specification". Orthokinetics, Inc. v. Safety Travel Chairs, Inc., supra. One of ordinary skill in



the art, reading the claims in light of the specification, would understand which protein kinases are inhibited.

With respect to the Examiner's allegation that "Applicants, however, were unable to say who needs inhibition (does everybody need inhibition) or what the utility is of the *in vitro* method", Applicants respectfully direct the Examiner's attention to page 9 of the Reply filed January 23, 2003, wherein Applicants explain that one suffering from any of the diseases listed on page 89, line 22 through page 90, line 19 of the instant specification would benefit from receiving the compound. This benefit results from inhibition of protein kinase activity. The utility of the *in vitro* method is to screen for therapeutics and/or diagnostics by determining whether a compound exhibits the desired inhibitory activity.

v) Regarding claim 19, the Examiner alleges that Applicants were unable to say who needs to have one or more protein kinases inhibited. Applicants respectfully direct the Examiner's attention to page 55, line 25 to page 56 line 20 wherein Applicants state "The compounds of this invention have antiangiogenic properties. These antiangiogenic properties are due at least in part to the inhibition of protein kinases essential for angiogenic processes." On page 89, line 22 to page 90, line 1 and page 93, line 20 to page 94, line 2 the specification lists diseases in which compounds of the invention can be used. On page 91, lines 4-6 of the instant specification, Applicants describe that it is envisaged that the disorders listed are mediated to a significant extent by protein kinase activity of one or more protein kinases. Thus, inhibition of protein kinase activity would benefit one suffering from, at least, any of the diseases enumerated on page 89, line 22 to page 90, line 1 and page 93, line 20 to page 94, line 2.

Based upon the foregoing, the rejection of claim 29 under 35 U.S.C. §112, second paragraph, is obviated and should be withdrawn.

The Examiner has rejected claims 28-38 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter not described in the specification to enable one to make or use the invention. Applicants respectfully traverse this rejection.

Without conceding to the correctness of the Examiner's rejections and for the sole purpose of expediting prosecution of the instant application and to place it in condition for allowance, Applicants have amended claim 37 to delete the term "hyperproliferative disorders". Applicants have further amended claim 37 to add "thyroid hyperplasia, Grave's disease, cysts, and polycystic

ovarian syndrome”, which are species of hyperproliferative disorders. Support for this amendment can be found, *inter alia*, on page page 90, lines 4-5 of the instant specification.

The Examiner states “No compound has shown clinical efficacy all cancers, thus no in vivo or in vitro assay could be validated for the identification of such a general agent. Applicants’ specification logically must lack such assay data.” Without conceding to the correctness of the Examiner’s rejections and for the sole purpose of expediting prosecution of the instant application and to place it in condition for allowance, Applicants have amended claim 38 to delete the term “angiogenesis”. Applicants have further amended claim 38 to add “arthritis, atherosclerosis, psoriasis, hemangiomas, myocardial angiogenesis, coronary and cerebral collaterals, ischemic limb angiogenesis, wound healing, peptic ulcer Helicobacter related diseases, virally-induced angiogenic disorders, fractures, Crow-Fukase syndrome (POEMS), preeclampsia, menometrorrhagia, cat scratch fever, rubeosis, neovascular glaucoma, diabetic retinopathy, retinopathy of prematurity, age-related macular degeneration, solid tumors, malignant ascites, hemopoietic cancers, Herpes simplex, Herpes Zoster, AIDS, parapoxvirus, psoriasis, Kaposi’s sarcoma, protozoan infections and toxoplasmosis, endometriosis, ovarian hyperstimulation syndrome, preeclampsia, systemic lupus, sarcoidosis, synovitis, inflammatory bowel disease, Crohn’s disease, sickle cell anaemia, Lyme’s disease, pemphigoid, Paget’s disease, hyperviscosity syndrome, Osler-Weber-Rendu disease, chronic inflammation, chronic occlusive pulmonary disease, asthma, rheumatoid arthritis and osteoarthritis”. These diseases have angiogenic components which can be affected by inhibition of protein kinase activity. Support for this amendment can be found, *inter alia*, at page 89, lines 21 to page 90, line 3 and page 93, line 20 to page 94, line 1 of the instant specification.

With respect to the method of claims 28-36, the benefit of inhibiting protein kinase activities *in vitro* is to test for pharmaceuticals or diagnostics as well as to initially estimate therapeutic dosages. Inhibiting protein kinase activities in mammals with below normal protein kinase activities or asymptomatic mammals with upregulated protein kinase activities would be beneficial because such inhibition would regulate and modulate abnormal or inappropriate cell proliferation, differentiation or metabolism, as stated on page 28, line 24 of the instant specification.

The Examiner asks “Is extensive experimentation required on the part of a potential infringer to determine if his use of Applicants’ inhibitor falls within the limitations of applications

claim?’ In re Kirk and Petrow, 153 USPQ 48 (CCPA 1967).” In In re Kirk and Petrow, the issue with respect to 35 U.S.C. §112 was that the specification contained no specific statement as to how the claimed compounds were useful. The therapeutic properties of the compounds were stated in general terms such as “useful biological properties”. This is not the case in the instant application. In the instant application Applicants have explained the functions of different protein kinases and how the activity of those protein kinases affect hyperproliferative disorders, inflammatory diseases and angiogenesis. Applicants have further explained how diseases and disorders with hyperproliferative, inflammatory or angiogenesis components can be affected by the inhibition of protein kinase activity and have given numerous examples of specific diseases and disorders in which inhibition of protein kinase activity would be useful. Applicants have clearly defined how their compounds can be used by listing diseases in which they can be used as well as detailing pharmaceutical formulations and dosage information on page 95, line 18 through page 105, line 5 of the instant specification. Applicants have given examples of which protein kinase activities are inhibited and have provided assays to test for inhibition of protein kinase activity. It would be routine experimentation in the field of medicinal chemistry to subject a compound to these assays.

With respect to the Examiner’s quotation of Brenner v. Manson, 148 USPQ at 696: “a patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion”, Applicants submit that the Examiner has taken the quotation out of context. Brenner v. Manson concerned an application for a product by process for which no utility was disclosed for the product. This differs from the instant case wherein specific compounds are disclosed as well as numerous practical applications for them, i.e. many diseases and disorders in which the compounds can be used. Immediately following the quotation cited by the Examiner, Brenner v. Manson proceeds to cite Application of Ruschig, 52 CCPA (Pat.) 1238, 1245, 343 F.2d 965, 970 “[A] patent system must be related to the world of commerce rather than to the realm of philosophy...”. The instant application is grounded in the world of commerce in that it is directed to therapeutics which can be used to treat diseases. It is not directed to compounds with no known utility. In fact, Applicants list numerous specific diseases and disorders in which the claimed compounds can be utilized.

The Examiner states “As U.S. Court of Customs and Patent Appeals stated In re Diedrich 138 USPQ at 130, quoting with approval from the decision of the board: ‘We do not believe that it

was the intention of the statutes to require the Patent Office, the courts, or the public to play the sort of guessing game that might be involved if an applicant could satisfy the requirements of the statutes by indicating the usefulness of a claimed compound in terms of possible use so general as to be meaningless and then, after his research or that of his competitors has definitely ascertained an actual use for the compound, adducing evidence intended to show that a particular specific use would have been obvious to men skilled in the particular art to which this use relates.' Applicants respectfully point out that In re Diedrich concerned a case in which the appellant stated his compounds were "useful for technical and pharmaceutical purposes." Not only did the appellant fail to provide a specific utility for his compounds, but upon appeal the appellant argued that the compounds could be used as X-ray contrast agents and proceeded to cite numerous patents which disclose compounds similar to his as being useful as X-ray contrast agents. The CCPA found that appellant's disclosure failed to satisfy the demands of 35 U.S.C. §112. On the contrary, in the instant case Applicants have provided specific uses for their compounds, i.e. inhibiting protein kinase activity, shown how to measure the inhibition of the protein kinase activity, i.e. providing assays used to test compounds, and listed specific diseases in which the inhibition of protein kinase activity would be beneficial. Applicants have not provided a vague or undefined use for their invention but have instead provided a detailed explanation of how the inhibition of protein kinase activity can be used in a therapeutic context.

Based upon the foregoing, the rejection of claims 28-38 under 35 U.S.C. §112, first paragraph is obviated and should be withdrawn.

The Examiner has rejected claim 18 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner points to the proviso that excludes a compound and reads "provided that when R<sup>1</sup> is methyl, R is not hydroxymethyl, nitrophenyl, m-OCH<sub>3</sub>C<sub>6</sub>H<sub>4</sub>, 4-hydroxy-3-methoxyphenyl or 2-hydroxy-3-bromophenyl." The Examiner alleges that these provisos lack description. Applicants respectfully traverse this rejection.

Adequate description under the first paragraph of 35 U.S.C. § 112 does not require literal support for the claimed invention. *In re Herschler*, 591 F.2d 693, 200 USPQ [\*5] 711 (CCPA 1979); *In re Edwards*, 568 F.2d 1349, 196 USPQ 465 (CCPA 1978); *In re Wertheim*, 541 F.2d

257, 191 USPQ 90 (CCPA 1976). Rather, it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that an applicant had possession of the concept of what is claimed. *In re Anderson*, 471 F.2d 1237, 176 USPQ 331 (CCPA 1973).

The patent law provides for the amendment of claims during prosecution. To proviso out specific compounds has been a long accepted practice within the USPTO. Literal support for a proviso excluding specific compounds has not previously been required. So long as an applicant conveys that he had possession of the invention at the time of filing he has met the requirements of 35 U.S.C. § 112, first paragraph.

Applicants' written description clearly conveys that Applicants had possession of the instant invention at the time of filing. One of ordinary skill in the art of medicinal chemistry would understand the written description and claims as filed by Applicants, as well as the amended claims. The application as originally filed provided adequate written description for the claims as originally filed. The proviso inserted by Applicants merely excises a small group of compounds. It does not change the nature of the instant invention. Since a narrower breadth is encompassed by the original claim, and the application as originally filed provided adequate written description for the originally-filed claims, it follows that a claim of narrower scope is necessarily supported. Therefore, the instant specification provides the requisite evidence of possession for amended claim 18.

Based upon the foregoing, the rejection of claim 18 under 35 U.S.C. §112, first paragraph, is obviated and should be withdrawn.

No fees are due for the instant amendment since the total number of claims after entry of the amendments hereinabove is not more than the total number of claims that Applicants have paid for to date.

Based upon the foregoing, Applicants believe that claims 18-21 and 23-39 and 41-45 are in condition for allowance. Claim 40 has been withdrawn. Prompt and favorable action is earnestly solicited.

If the Examiner believes that a telephone conference would advance the condition of the instant application for allowance, Applicants invite the Examiner to call Applicants' agent at the number noted below.

Respectfully submitted,

Date: August 14, 2003

Gayle B. O'Brien

**Gayle B. O'Brien**  
Agent for Applicants  
Reg. No. 48,812

Abbott Bioresearch Center  
100 Research Drive  
Worcester, MA 01605  
(508) 688-8053